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1	US 20050193047 A1	20050901	113	Method for synchronizing symbol timing	708/300
2	US 20050186933 A1	20050825	198	Channel equalization system and method	455/296
3	US 20040252229 A1	20041216	33	Method and apparatus for providing carrier synchronization in digital broadcast and interactive systems	348/385.1
4	US 20040246891 A1	20041209	91	Air interface frame formatting	370/215
5	US 20040213360 A1	20041028	23	Deferred decorrelating decision-feedback detector for supersaturated communications	375/340
6	US 20040203397 A1	20041014	25	Signal-to-noise ratio estimation of CDMA signals	455/63.1
7	US 20040161022 A1	20040819	16	Efficient back-end channel matched filter (CMF)	375/152
8	US 20040081205 A1	20040429	52	Maximum likelihood synchronization for a communications system using a pilot symbol	370/503
9	US 20040071234 A1	20040415	16	High rate receiver	375/341
10	US 20040071104 A1	20040415	57	Multi-mode method and apparatus for performing digital modulation and demodulation	370/320
11	US 20040037202 A1	20040226	30	Multichannel digital recording system with multi-user detection	369/94
12	US 20040009759 A1	20040115	23	Method and apparatus for securely enabling a radio communication unit from standby mode	455/258
13	US 20030185286 A1	20031002	28	Matched filter-based handoff method and apparatus	375/152
14	US 20030118081 A1	20030626	69	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130

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1		Fu, Dengwei et al.
2	375/348; 455/63.1	Trans, Francois
3	348/388. 1; 725/135	Jiang, Yimin et al.
4	370/326; 370/458	Kay, Stanley E. et al.
5		McElwain, Thomas P.
6	455/452. 1; 455/67.1 1	Yoon, Young C. et al.
7		Glazko, Serguei A. et al.
8		Coulson, Alan James
9		Li, Wenzhen
10	370/208; 370/338; 370/342	Boesel, Robert W. et al.
11	369/95	Brommer, Karl D. et al.
12	455/255; 455/313	Mayor, Michael A. et al.
13		Yuen, Elmer
14		Philips, Lieven et al.

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15	US 20030086515 A1	20030508	196	Channel adaptive equalization precoding system and method	375/346
16	US 20030058929 A1	20030327	22	ADAPTIVE WIRELESS COMMUNICATION RECEIVER	375/150
17	US 20030031275 A1	20030213	30	Robust burst detection and acquisition system and method	375/326
18	US 20030021365 A1	20030130	30	Robust burst detection and acquisition system and method	375/343
19	US 20030016770 A1	20030123	195	Channel equalization system and method	375/346
20	US 20020181633 A1	20021205	121	Means and method for a synchronous network communications system	375/354
21	US 20020122505 A1	20020905	17	Frequency and phase estimation for MPSK signals	375/329
22	US 20020067783 A1	20020606	8	Apparatus for estimating phase information using matched filter in communication system and method thereof	375/343
23	US 20020067757 A1	20020606	67	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130
24	US 20010053175 A1	20011220	24	Ultra-wideband communications system	375/130
25	US 20010038674 A1	20011108	110	MEANS AND METHOD FOR A SYNCHRONOUS NETWORK COMMUNICATIONS SYSTEM	375/355
26	US 6968021 B1	20051122	22	Synchronization method and apparatus for modems based on jointly iterative turbo demodulation and decoding	375/340

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15		Trans, Francois et al.
16	375/152	COX, EARL C. et al.
17		Min, Jonathan S. et al.
18	375/232	Min, Jonathan S. et al.
19		Trans, Francois et al.
20		Trans, Francois
21		Avidor, Dan et al.
22		Sung, Sang Hun
23		Philips, Lieven et al.
24	375/142; 375/256	Hoctor, Ralph Thomas et al.
25	370/503; 375/371	TRANS, FRANCOIS
26	375/265; 375/324; 375/343; 375/371; 714/799	White; Steven L. et al.

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27	US 6952440 B1	20051004	46	Signal detector employing a Doppler phase correction system	375/150
28	US 6931055 B1	20050816	45	Signal detector employing a doppler phase correction system	375/150
29	US 6904110 B2	20050607	183	Channel equalization system and method	375/350
30	US 6904079 B2	20050607	14	Access channel structure for wireless communication system	375/145
31	US 6898233 B2	20050524	60	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130
32	US 6879627 B1	20050412	30	Variable rate continuous mode satellite modem	375/222
33	US 6874006 B1	20050329	108	Apparatus and method for rectangular-to-polar conversion	708/442

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27	375/142; 375/143; 375/152; 375/343; 375/346	Underbrink; Paul A.
28	375/142; 375/143; 375/152; 375/343; 375/346	Underbrink; Paul A. et al.
29	375/229	Trans; Francois et al.
30	370/491; 370/500; 370/510; 370/514; 375/149; 375/364	Hoffmann; John E. et al.
31	375/146; 375/222	Philips; Lieven et al.
32		Davidson; Jeffrey et al.
33		Fu; Dengwei et al.

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34	US 6850557 B1	20050201	33	Signal detector and method employing a coherent accumulation system to correlate non-uniform and disjoint sample segments	375/150
35	US 6836515 B1	20041228	88	Multi-modulation radio communications	375/260
36	US 6826140 B2	20041130	33	Multichannel digital recording system with multi-user detection	369/94
37	US 6810087 B2	20041026	25	Ultra-wideband communications system	375/259
38	US 6778613 B2	20040817	15	Frequency and phase estimation for MPSK signals	375/329
39	US 6772181 B1	20040803	111	Apparatus and method for trigonometric interpolation	708/313
40	US 6697345 B1	20040224	85	Multi-transport mode radio communications having synchronous and asynchronous transport mode capability	370/330
41	US 6693953 B2	20040217	18	Adaptive wireless communication receiver	375/141

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34	342/378; 455/12.1; 701/213	Gronemeyer; Steven A.
35	375/261; 375/269	Kay; Stanley E. et al.
36	369/124. 02; 369/124. 04; 369/47.1 9; 369/59.2 2	Brommer; Karl D. et al.
37	332/185; 380/33; 380/35	Hector; Ralph Thomas et al.
38	329/304; 375/344	Avidor; Dan et al.
39	708/290	Fu; Dengwei et al.
40	370/337; 370/466; 455/562. 1	Corrigan, III; John E. et al.
41	370/332; 455/13.4; 455/226. 3; 455/67.1 3	Cox; Earl C. et al.

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42	US 6650649 B1	20031118	86	Extension interface units in a communication system	370/402
43	US 6597727 B2	20030722	62	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/147
44	US 6560303 B1	20030506	28	Joint frame, carrier and clock synchronization scheme	375/365
45	US 6515981 B1	20030204	22	Packet-switched spread-spectrum system	370/342
46	US 6477208 B1	20021105	43	Composite trellis system and method	375/265
47	US 6421399 B1	20020716	15	Frequency and phase estimation for MPSK signals	375/329
48	US 6393049 B1	20020521	26	Two-stage synchronization of spread-spectrum signals	375/142
49	US 6377640 B2	20020423	117	Means and method for a synchronous network communications system	375/354
50	US 6324207 B1	20011127	31	Handoff with closed-loop power control	375/141
51	US 6317452 B1	20011113	66	Method and apparatus for wireless spread spectrum communication with preamble sounding gap	375/130

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42	370/463; 710/300	Muhammad; Tariq et al.
43	375/222; 375/316	Philips; Lieven et al.
44	370/509; 370/514	Fan; Yigang et al.
45	370/335	Schilling; Donald L. et al.
46	714/786; 714/796	Huff; Ronald J
47	375/260; 375/343	Avidor; Dan et al.
48	375/143; 375/144; 375/145	Davidovici; Sorin et al.
49	370/286; 370/289	Trans; Francois
50	370/332; 375/225; 455/436; 455/437; 455/522	Kanterakis; Emmanuel et al.
51	375/141; 375/145	Durrant; Randolph L. et al.

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52	US 6307877 B1	20011023	61	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for the modem	375/130
53	US 6304592 B1	20011016	28	Coherent detection using matched filter enhanced spread spectrum demodulation	375/152
54	US 6298098 B1	20011002	11	Burst demodulator for use in high speed bidirectional digital cable transmission system	375/317
55	US 6282228 B1	20010828	80	Spread spectrum codes for use in communication	375/140
56	US 6233290 B1	20010515	103	Method for noncoherent coded modulation	375/341
57	US 6215811 B1	20010410	29	Store and dump, spread-spectrum handoff	375/143
58	US 6212566 B1	20010403	60	Interprocess communication protocol system modem	709/230
59	US 6177835 B1	20010123	18	Method and apparatus for high data rate demodulation	329/304

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52	375/222	Philips; Lieven et al.
53		Davidovici; Sorin et al.
54	375/340	Krasner; Norman F. et al.
55	327/164; 375/141	Monroe; Robert
56	375/262; 375/265; 714/792; 714/796	Raphaeli; Dan
57	370/412; 375/142; 375/150; 375/152; 455/436	Yuen; Elmer
58	709/200; 709/231; 709/237; 712/1	Vanhoof; Jan et al.
59	329/306; 375/324	Grebowsky; Gerald J. et al.

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60	US 6154483 A	20001128	29	Coherent detection using matched filter enhanced spread spectrum demodulation	375/130
61	US 6061406 A	20000509	8	Multichannel time shared demodulator and method	375/260
62	US 6061359 A	20000509	23	Increased-capacity, packet spread-spectrum system and method	370/441
63	US 5999562 A	19991207	27	Intelligent power management for a programmable matched filter	375/152
64	US 5974091 A	19991026	41	Composite trellis system and method	375/265
65	US 5963586 A	19991005	68	Method and apparatus for parallel noncoherent correlation of a spread spectrum signal.	375/142
66	US 5960040 A	19990928	32	Communication signal processors and methods	375/279
67	US 5953370 A	19990914	66	Apparatus for receiving and correlating a spread spectrum signal	375/150

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60	370/336; 375/376; 708/314	Davidovici; Sorin et al.
61	375/340; 375/347; 375/349	Carson; Lansing McLain et al.
62	375/130	Schilling; Donald L. et al.
63	375/343; 455/231; 455/343. 2	Hennedy; Michael et al.
64	714/786; 714/796	Huff; Ronald J
65	375/274; 375/336; 375/343	Durrant; Randolph L. et al.
66	329/304; 332/103; 375/140; 375/308; 375/329	Cai; Khiem V. et al.
67	375/140	Durrant; Randolph L. et al.

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68	US 5881100 A	19990309	66	Method and apparatus for coherent correlation of a spread spectrum signal	375/150
69	US 5872810 A	19990216	61	Programmable modem apparatus for transmitting and receiving digital data, design method and use method for said modem	375/222
70	US 5872808 A	19990216	23	Apparatus and method for synchronization of direct sequence CDMA signals	375/152
71	US 5864578 A	19990126	27	Matched filter-based handoff method and apparatus	375/143
72	US 5856998 A	19990105	67	Method and apparatus for correlating a continuous phase modulated spread spectrum signal	375/150
73	US 5844951 A	19981201	33	Method and apparatus for simultaneous beamforming and equalization	375/347
74	US 5832028 A	19981103	67	Method and apparatus for coherent serial correlation of a spread spectrum signal	375/150
75	US 5764691 A	19980609	27	Intelligent power management for a programmable matched filter	375/152
76	US 5757847 A	19980526	66	Method and apparatus for decoding a phase encoded signal	375/150
77	US 5754585 A	19980519	67	Method and apparatus for serial noncoherent correlation of a spread spectrum signal	375/150

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68	375/274; 375/336; 375/343	Durrant; Randolph L. et al.
69	375/130	Philips; Lieven et al.
70		Davidovici; Sorin et al.
71	370/331; 370/412; 375/144; 455/436; 455/452. 2	Yuen; Elmer
72	375/336; 375/343	Durrant; Randolph L. et al.
73	375/233; 455/137	Proakis; John G. et al.
74	375/367	Durrant; Randolph L. et al.
75	375/343; 455/231; 455/343. 2	Hennedy; Michael et al.
76	375/331; 375/343	Durrant; Randolph L. et al.
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78	US 5754584 A	19980519	67	Non-coherent spread-spectrum continuous-phase modulation communication system	375/142
79	US 5706314 A	19980106	10	Joint maximum likelihood channel and timing error estimation	375/340
80	US 5692007 A	19971125	67	Method and apparatus for differential phase encoding and decoding in spread-spectrum communication systems with continuous-phase modulation	375/142
81	US 5680414 A	19971021	67	Synchronization apparatus and method for spread spectrum receiver	375/150
82	US 5659574 A	19970819	67	Multi-bit correlation of continuous phase modulated signals	375/150
83	US 5629956 A	19970513	67	Method and apparatus for reception and noncoherent serial correlation of a continuous phase modulated signal	375/150
84	US 5627856 A	19970506	67	Method and apparatus for receiving and despreading a continuous phase-modulated spread spectrum signal using self-synchronizing correlators	375/150

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78	375/274	Durrant; Randolph L. et al.
79	348/537; 370/514; 370/520; 375/344; 375/346; 375/355; 375/368	Davis; Mark et al.
80	375/146; 375/150; 375/273; 375/283	Durrant; Randolph L. et al.
81	370/515; 375/149; 375/152; 375/367	Durrant; Randolph L. et al.
82	375/336	Durrant; Randolph L. et al.
83	375/336; 375/343	Durrant; Randolph L. et al.
84	375/343	Durrant; Randolph L. et al.

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85	US 5610940 A	19970311	67	Method and apparatus for noncoherent reception and correlation of a continuous phase modulated signal	375/150
86	US 5425058 A	19950613	11	MSK phase acquisition and tracking method	375/336
87	US 5303263 A	19940412	30	Transmission channel characteristic equalizer	375/229
88	US 5283780 A	19940201	14	Digital audio broadcasting system	370/312
89	US 5272446 A	19931221	23	Digitally implemented fast frequency estimator/demodulator for low bit rate maritime and mobile data communications without the use of an acquisition preamble	329/304

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85	375/274; 375/343	Durrant; Randolph L. et al.
86	329/300; 375/274; 375/305	Mui; Shou Y.
87	375/341; 714/795	Shoji; Yasuo et al.
88	370/314; 370/436; 375/344; 381/2; 455/257; 455/260; 455/65; 714/786	Schuchman; Leonard et al.
89	329/310; 375/324; 375/329; 708/311; 708/404; 708/405	Chalmers; Harvey et al.

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90	US 3795865 A	19740305	26	AUTOMATED REAL TIME EQUALIZED MODEM	375/232

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90	178/69R; 327/100; 333/18; 333/28R; 375/270; 375/286; 375/353	Armstrong; Thomas R.